BEFORE THE FRESH WATER HEARINGS PANEL APPOINTED BY THE OTAGO REGIONAL COUNCIL

IN THE MATTER OF	of the Resource Management Act 1991
AND	
IN THE MATTER OF	the Proposed Otago Regional Policy Statement 2021 Fresh Water Planning Instrument Hearing
SUBMITTER	OceanaGold New Zealand Limited

STATEMENT OF EVIDENCE BY CLAIRE HUNTER

28 JUNE 2023

INTRODUCTION AND BACKGROUND

1 My full name is Claire Elizabeth Hunter. I am a resource management consultant and Director of Mitchell Daysh Limited, a nation-wide resource management and environmental planning consultancy firm. I have over 18 years' experience in this field. I hold an honours degree in Environmental Management from the University of Otago. I am a member of the Resource Management Law Association and an Associate Member of the New Zealand Planning Institute.

2 Over the past four years I have been involved in projects for Oceana Gold New Zealand Limited (**OceanaGold**). I am familiar with the company's Macraes mine site and with its operations at Waihi in the Hauraki District. My recent work for OceanaGold has included preparing the resource consent application for the Deepdell North project and I gave evidence in support of that application at the Council hearing. A summary of my recent project and consenting experience is set out in **Appendix A**.

3 Through my work, I am familiar with the now partially operative Otago Regional Policy Statement, and I assisted various clients, including OceanaGold with their submissions on the Proposed Otago Regional Policy Statement 2021 (**PORPS**), was involved in expert witness caucusing on the PORPS and appeared before the Hearings Panel (**the Panel**) on the non-Freshwater Parts of the PORPS.

4 In preparing this evidence I have reviewed the:

a. Submission and further submission on behalf of OceanaGold;

b. Section 42A report - Proposed Otago Regional Policy Statement Parts considered to be a Freshwater Planning Instrument (**FPI**) under section 80A of the Resource Management Act 1991 - 2 June 2023 (**section 42A report**);

c. Further submissions on OceanaGold's submission; and

d. The evidence of Mr Shamubeel Eaqub, Ms Debbie Clarke, and Ms Alison Paul on behalf of OceanaGold.

5 Although this is not an Environment Court hearing, I have read and agree to comply with the Environment Court's Code of Conduct for Expert Witnesses. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I confirm that I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

MACRAES WATER MANAGEMENT – OVERVIEW

6 Water is an essential component when mining for and producing gold, and at the Macraes Operation water is used in a number of ways. This is explained in further detail in the evidence of Ms Clarke.

7 The Water Management Plan for the site, which is required by regional consents issued by the Otago Regional Council (**ORC**) aims to keep clean water clean to the greatest extent possible to protect downstream water quality. This is done by diverting clean water around mining areas, either via a pipe or open drains. The diverted clean water is then allowed to discharge into the same catchment at a point downstream of the mining operations.

8 The Macraes Operation takes freshwater via a consented abstraction from the Taieri River. This water is initially stored on site at the Lone Pine Reservoir where it is used by the Macraes Flat Trout Hatchery, and by OceanaGold to run the processing plant, for drinking water and for staff toilet and shower facilities.

9 Where water does come into contact with the mining process, it is circulated within the mine-water system for re-use in parts of the processing plant, and for dust suppression activities on haul roads and on the surface of the tailings impoundments in dry weather conditions.

10 Working areas of the mine, including pits and underground workings, need to be kept dry, meaning that both intercepted groundwater and ponded surface water must be managed, including with treatment before final discharge to the receiving environment where necessary.

11 Against this background, OceanaGold has a significant interest in the freshwater provisions of the PORPS. In this evidence I discuss OceanaGold's

specific submissions on the freshwater provisions, with a particular focus on where I am suggesting amendments are necessary and/or where I may disagree with the section 42A report writer.

12 I have provided as **Appendix B** my preferred amendments to the provisions, which I explain in the following sections of this evidence.

OCEANAGOLD'S SUBMISSIONS ON THE FRESHWATER PROVISIONS

LF – WAI – O1 – Te Mana o te Wai

13 Objective LF- WAI – O1 seeks that the mauri of Otago's water bodies and their health and wellbeing is protected, and restored where it is degraded. OceanaGold submitted in partial support of this objective, acknowledging the obligations inherent within the National Policy Statement for Freshwater Management 2020 (**NPSFM**) and Te Mana o te Wai, but also ensuring that the objective appropriately recognises that it may not always be practicable to restore the mauri of particular water bodies within Otago, and seeking improvement as the more achievable outcome.

14 I agree with OceanaGold that the restoration of the mauri of already altered water bodies may not always be practicable, particularly during the term of the PORPS. Therefore, it would be appropriate for the Objective to seek to improve or promote restoration where this can be practicably and meaningfully achieved.

15 The section 42A report writer recommends rejecting OceanaGold's submission on the basis that "improve" is not an appropriate term to use in relation to mauri. It is the writer's view that "*mauri – is not something that can be 'improved', it is either intact or lost"* and "*in the case of the latter situation restoration is the required action*"[1]. In my view this is quite an absolute perspective. However, in the subsequent sentence the writer recommends amendments to "*LF – WAI – M1 for the development of a Kaupapa Kai Tau monitoring programme [that] will assist with improving understanding of mauri and how it is understood, including changes to its state over time*". This sentence appears to indicate that the mauri of the

[1] Paragraph 756 of the Section 42A report.

water is not fixed in one state (intact or lost) but in fact could be something that can be incrementally improved or degraded. I also note that there is a tool within the Ministry of the Environment's Cultural Health Index for Streams and Waterways and the 'mauri compass' tool[2] which are quantitative tools to score mauri on a sliding scale. The NPSFM also uses the term "improves" regarding water quality in Policy 5. On this basis I suggest that there is a mismatch between the way the officer seeks to characterise mauri in this context as being either "lost or intact", and the matters I refer to above. I would have thought that where mauri was in a degraded state, then improvement (or partial restoration) was a valuable management option to have available.

16 OceanaGold's operations at Macraes mine seek to protect downstream water quality in particular. In my view this is consistent with LF – WAI – O1 because it "protects" downstream water quality as per the chapeau of the objective, however the water necessarily needs to be managed onsite to enable this protection to occur. This includes the diversion of waterways around mine impacted areas, and/or the storage and treatment of water. Some of these activities may impact on the mauri of the waterbody, in that they are no longer within their natural form. Restoration of the mauri (or a return to its "natural or original form") of such waterbodies could potentially have adverse effects on downstream water quality. This would not be an appropriate outcome for the mine site, nor on the wider receiving environment or the water body itself.

17 On the basis that the water management system at Macraes is therefore necessary to provide overall protection for downstream waterbodies (water quality and aquatic ecology in particular), there is limited capacity to fully restore the mauri of these impacted water bodies during the term of the PORPS. This creates an inherent conflict with objective LF – WAI – O1 that may lead to perverse outcomes at sites like Macraes, such as an inability to obtain diversion consents to undertake mining operations and in order to protect water quality and aquatic habitats.

[2] https://www.mauricompass.com/how-it-works.html

18 Establishing a policy framework that seeks to improve aspects that may contribute to the mauri of the waterbody is likely to be a more tenable outcome in many circumstances around Otago.

LF – WAI – P1 – Prioritisation

19 LF – WAI – P1 seeks that in the management of all fresh water in Otago, prioritise:

> *(1) First, the health and wellbeing of waterbodies and freshwater ecosystems, te hauora o te wai and te hauora o te taiao, and the exercise of mana whenua to uphold these;*
>
> *(2) Second, the health and wellbeing needs of people, te hauora o te tangata; interacting with water through ingestion (such as drinking water and consuming harvested resources) and immersive activities (such as harvesting resources and bathing), and*
>
> *(3) Third, the ability of people and communities to provide for their social, economic, and cultural wellbeing, now and in the future.*

20 OceanaGold in its submission on this policy seeks guidance on how to apply the priorities where there is a conflict between them. In response to this submission the section 42A report writer says that "*it is not clear to me how a conflict would arise in the application of LF – WAI – P1, which clearly sets out which matters are to be prioritised over other matters; first, the health and well-being of water bodies and freshwater ecosystems, then the health needs of people, then other uses. I appreciate this is not a simple exercise, but it is not uncommon to need to weigh and reconcile various provisions when coming to decisions on resource use*[3] ".

21 While I agree with the section 42A report writer that there is nothing particularly unclear about how LF – WAI – P1 is drafted, I think the issue that OceanaGold is raising relates to how the policy will be implemented in the Otago region. In essence, they ask whether it is nuanced enough.

[3] Paragraph 828 of the Section 42A report.

22 Clause 3.1(1) of the NPSFM explains the concept of Te Mana o te Wai. It states that:

> *Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.*

23 I think the latter part of this explanation is important. It is appropriate to recognise that Te Mana o te Wai is about achieving a balance between the different priorities. The three priorities are all "acceptable" outcomes, and, in my view, that is why they each need to be given priority. The ranking ensures that in making decisions the advancing of a lower order priority cannot be pursued in a way that means a higher order priority is no longer being met. That is not the same as saying that a higher order priority can be pursued without consideration of lower order priorities. Were that to happen there would be no 'balance'.

24 Clause 3.2 of the NPSFM also provides further guidance as to how the concept of Te Mana o te Wai should be expressed in each region, as follows:

> *(1) Every regional council must engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region.*
>
> *(2) Every regional council must give effect to Te Mana o te Wai, and in doing so must:*
>
> *(a) Actively involve tangata whenua in freshwater management (including decision making processes), as required by clause 3.4; and*
>
> *(b) Engage with communities and tangata whenua to identify long term visions, environmental outcomes, and other elements of the NOF; and*
>
> *(c) **Apply the hierarchy of obligations**, set out in **clause 1.3(5):***
>
> *(i) When **developing long term visions under clause 3.3**; and*

*(ii) When **implementing the NOF under subpart 2**; and*

*(iii) When developing **objectives, policies, methods and criteria** for any purpose under subpart 3 **relating to natural inland wetlands, rivers, fish passage, primary contact sites, and water allocation**; and*

(d) Engage the application of a diversity of systems of values and knowledge, such as matauranga Maori, to the management of freshwater; and

(e) Adopt an integrated approach, ki uta ki tai, to the management of freshwater (see clause 3.5);

*(3) **Every regional council must include an objective in its regional policy statement that describes how the management of freshwater in the region will give effect to Te Mana o te Wai**. (my emphasis added)*

25 I note that Clause 3.2(2)(c) refers specifically to the hierarchy of obligations and sets out circumstances as to where and how this should be applied. I acknowledge that this list is not exhaustive, but it does seem to imply that a more sophisticated approach to the interpretation of Te Mana o te Wai and the application of priorities / the hierarchy and the balancing of these, as it specifically applies within the Otago region, is required.

26 In response to other submitters on this matter, the section 42A report writer considers that it is not the role of the PORPS to manage specific activities and that is the responsibility of the regional plan, which, in accordance with Clause 3.2, must consider how to give effect to Te Mana o te Wai at every stage of its development and in all types of provisions[4].

27 I agree with this; however, Clause 3.2(3) of the NPSFM is specific to a regional policy statement and requires that every regional council must include an objective that describes how the management of freshwater will give effect to Te Mana o te Wai. Replicating the NPSFM is not likely to be sufficient. In my view giving effect to this clause will be more likely achieved via the "Visions and Management" provisions which commence at LF – VM – O2, as well as the proposed region wide objective (LF – VM – O1A). These

[4] Paragraph 831 of the Section 42A report.

have been specifically developed for each FMU / rohe within Otago, and in my view are superior at giving effect to Te Mana o te Wai through specific actions and outcomes. They also achieve the "balance" I discussed earlier.

28 The more general provisions intended to give more overarching effect to the NPSFM (LF – WAI – O1 and LF – WAI – P1) seem to me to be superfluous and could be deleted from the PORPS as a result.

LF – VM – O3 – North Otago FMU

29 OceanaGold's submission supported this objective in part and sought some amendments. OceanaGold was concerned that clause (4) as it requires fish passage to be achieved via natural migration, does not allow for other solutions to be developed to enable this to occur e.g. trap and transfer. In catchments where there are already modifications to waterways through damning and diversion activities, such as within the Macraes site, these types of mitigation measures can achieve good outcomes, while natural passage is impractical.

30 OceanaGold also sought amendments to Clause (5) to avoid any suggestion that artificial waterbodies, which may be created to serve a specific purpose (e.g., a stormwater retention pond or a pit lake post mining) may also need to be managed for contact recreational purposes.

31 On the basis that the section 42A report writer recommends including a region wide objective for freshwater, a number of changes to LF – VM – O3 have been proposed. The objective now reads as follows:

> ***LF – VM – O3 – North Otago FMU Vision***
>
> *By 2050 in the North Otago FMU:*
>
> *(1) Management recognises that the Waitaki River is influenced in part by catchment areas within the Canterbury Region;*
>
> *(2) Healthy riparian margins, wetlands, estuaries and lagoons support the health of downstream coastal ecosystems.*

32 I consider it appropriate for this objective to focus on supporting the health of downstream coastal ecosystems as a key outcome for this FMU and have no issues with the re-drafting of this objective.

LF – FW – O1A – Region wide objective for freshwater *(new)*

33 As noted above the section 42A report writer proposes the addition of a new region wide objective for freshwater to sit within the visions and management section of the PORPS. This reads as follows:

> ***LF-FW-O1A – Region wide objective for freshwater***
>
> *In all FMUs and rohe in Otago and within the timeframes specified in the freshwater visions in LF-VM-O2 to LF-VM-O6:*
>
> *(1) Freshwater ecosystems support healthy populations of indigenous species and Mahika kai that are safe for consumption;*
>
> *(2) The interconnection of land, freshwater (including groundwater) and coastal water is recognised;*
>
> *(3) Indigenous species can migrate easily and as naturally as possible;*
>
> *(4) The natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent practicable;*
>
> *(5) The ongoing relationship of Kai Tahu with wahi tapuna, including access to and use of water bodies, is sustained;*
>
> *(6) The health of water supports the health of people and their connections with water bodies;*
>
> *(7) Innovative and sustainable land and water management practices provide for the health and wellbeing of waterbodies and freshwater ecosystems and improve resilience to the effects of climate change; and*
>
> *(8) Direct discharges of wastewater to water bodies are phased out to the greatest extent practicable.*

34 For the most part, the outcomes specified in this new objective are stated appropriately, however the issue that OceanaGold raised regarding indigenous species migration continues to prevail. Clause (3) uses the term "as naturally as possible". I have concerns with this on the basis that the term

'possible' is overly broad, in the sense that, often anything can be 'possible' however what is possible may not be operationally and/or economically practicable. Conversely, the section 42A report writer considers that this clause is drafted to sufficiently recognise that there will be situations where natural solutions are not possible.

35 Despite this view, I note that later in the document the section 42A report writer acknowledges that the use of this term in a different context may be too stringent[5].

36 Given that there is clearly some discrepancy as to how the term "as far as naturally possible" can be interpreted, I think it is appropriate to amend the wording of this clause to make its intent abundantly clear:

> *Appropriate provision is made for indigenous species to migrate to and from the coastal environment.*

37 I am also unclear as to how the term "*to the greatest extent practicable,*" as it applies throughout this objective, would be tested. As drafted, it could imply that the demonstration of practicability could be interpreted on a sliding scale. And that the application of the "greatest extent practicable" therefore means something more than "to the extent practicable or reasonably practicable", or even the best practicable option. If this is the intent, it is not clear to me how an applicant would be able to demonstrate that they have gone to this level of effort and therefore extent versus something lesser in terms of a practicability test. In other words, where is the line between achieving what is practicable versus achieving something to the ”greatest extent” that is practicable.

38 To avoid any uncertainty, I think it would be preferable to remove the word "greatest" where it occurs within this objective.

LF -FW -O8 – Fresh water

39 In its submission OceanaGold raised a number of concerns with this objective. As a result of the section 42A report writers’ recommendation to

[5] Paragraph 1478 of the Section 42A report.

include a new objective for freshwater as noted above, a consequential amendment is the deletion of LF – FW – O8. I have no issues with the deletion of this objective on this basis.

LF – FW – O9 – Natural Wetlands

40 OceanaGold seeks changes to the chapeau of this objective to require that wetlands are protected, improved or restored. Oceana Gold considers that this change will promote an ability to improve values overall rather than requiring restoration as an absolute objective, ensuring consistency with the NPSFM.

41 Although there is an obligation within the NPSFM to prevent the further loss of wetland extent, I agree with OceanaGold that the provisions of the PORPS need to acknowledge that this can be achieved through mitigation, offsetting, and/or compensatory measures to achieve at least a neutral outcome, if not a net increase in terms of wetlands values.

42 I also agree that the current drafting of this objective does not properly give effect to the NPSFM. The NPSFM and National Environmental Standards for Freshwater (NESFW) provides a pathway for certain activities to occur within natural wetlands (including mining activities). I also note that the NESFW was amended on 8 December 2022, after the FPI was notified and after submissions closed, to include a discretionary activity consenting pathway for certain mining activities. Once a functional need has been demonstrated, such activities within wetlands can be considered subject to the application of the effects management hierarchy. The application of the effects management hierarchy anticipates that there may be unavoidable adverse effects on wetlands, and that these can be remediated, mitigated, offset or compensated for. Clause (3) of this objective, which requires an absolute "no reduction" in wetland ecosystem health, hydrological functioning, amenity values, extent or water quality, appears to be at odds with this. This differs from how Clause (2) has been expressed, which now refers to "no net decrease, and preferably an increase". This better aligns with the NPSFM in my view, and for this reason I consider that clauses (3) and (4) which are currently expressed in absolute terms, could be amalgamated and drafted as follows:

LF–FW–O9 – Natural wetlands

Otago's natural wetlands are protected or restored so that:

(1) mahika kai and other mana whenua values are sustained and enhanced now and for future generations,

(2) there is no net decrease, and preferably an increase, in the ~~range~~ extent and diversity of indigenous ecosystem types and habitats in natural wetlands,

(3) where appropriate there is an improvement in wetland ecosystem health, hydrological functioning, amenity values~~, extent~~ or water quality, and, if applicable, their flood attenuation and water storage capacity is maintained or improved.

LF – FW – P7 – Freshwater

43 OceanaGold submitted in partial opposition to this policy, stating that the drafting is too absolute and could mean that the environmental outcomes, attributes states and limits must protect any habitat of a single indigenous plant or animal that may be associated with a water body, whether in it or near it.

44 The section 42A report writer recommends rejecting OceanaGold's submission on this matter stating that:

> *"I understand from ORC's closing legal submissions on the non-FPI part of the pORPS that "protect" is considered to be a subset of "maintain". For example, something is maintained in its current state if it is protected (i.e. kept from harm). In this case, Policy 9 specifically requires protecting and therefore I do not recommend accepting the part of the submission points by OceanaGold or Horticulture NZ seeking to replace "protect" with "maintain".*
>
> *I disagree with Oceana Gold that the policy is so absolute that it would require any habitat of a single indigenous species to be protected in every instance. This is primarily because the policy describes actions that underpin decision-making on various parts of the NOF, such as environmental outcomes. In my view, the wording of LF-FW-P7(2) as I recommend it be*

amended mirrors the requirement in Policy 9 of the NPSFM. I do not recommend accepting this part of the submission point by Oceana Gold."[6]

45 Notwithstanding this, I note that the section 42A report writer has recommended amendments to Clause (2) in response to other submitters. The clause now reads:

> *(2) the habitats of indigenous freshwater species ~~associated with water bodies~~ are protected and sustained, including by providing for fish passage,*

46 I agree with the section 42A report writer that this amendment more accurately reflects the wording used in Policy 9 of the NPSFM and reduces uncertainty about what "associated with" means. In my view this is sufficient in addressing OceanaGold's concern regarding the extent of the application of "protection".

47 I note that the section 42A report writer has also proposed a new policy, falling from Policy LF – FW-P7(6). The direction in this clause was that "fresh water is allocated within environmental limits and used efficiently". The section 42A report writer concurs with submitters that the pORPS should give more direction on the allocation and efficiency of water use, the benefits to be derived from using water and provision for water storage. To address this matter, the section 42A report recommends amendments to policy LF-FW-P7, and the addition of a new policy LF-FW-P7A - Water allocation.

> ***LF-FW-P7A – Water allocation and use***
>
> *Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by:*
>
> *(1) allocating fresh water efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:*

[6] Paragraph 1389 and 1390 of the Section 42A report.

(a) community drinking water supplies,

(b) renewable electricity generation, and

(c) land-based primary production,

(2) ensuring that no more fresh water is abstracted than is necessary for its intended use,

(3) ensuring that the efficiency of freshwater abstraction, storage, and conveyancing infrastructure is improved, including by providing for off-stream storage capacity, and

(4) providing for spatial and temporal sharing of allocated fresh water between uses and users where feasible.

48 The section 42A report writer states that they have recommended the inclusion of this new policy in part to recognise the importance of land based primary production (which includes viticulture) in Otago[7]. OceanaGold has provided economic evidence to the Panel demonstrating that the contribution from the Macraes mine is of considerable regional significance. Mining activities are a highly efficient user of water in a comparative sense. Mr Eaqub shows how the Macraes mining operation is extremely efficient at creating considerable economic upside for the amount of water used, which compares very favourably against other more traditional agricultural uses.

49 It is, therefore, unclear why "land-based primary production" has been used in preference to "primary production". And while I acknowledge that clause (1) does not represent an exhaustive list of activities using "including" within its drafting, I am concerned that it could be interpreted that way and by not including "primary production" more broadly it could be seen as being excluded from allocation decisions.

LF – FW – P9 – Protecting Natural Wetlands

50 As the section 42A report writer acknowledges LF-FW-P9 as notified reflects the mandatory policy in clause 3.22 contained in the NPSFM when it was notified in 2020. That policy was significantly amended in December 2022.

[7] Paragraph 286 of the Section 42A report.

OceanaGold's submission sought to ensure that this policy was aligned with those amendments and provides for functional and locationally constrained activities, such as mining, to have a consenting pathway where they may co-exist with wetlands. As a result of these amendments to the NPSFM and other matters, the section 42A report writer recommends replacing it with the following:

> *Protect natural wetlands by implementing clause 3.22(1) to (3) of the NPSFM, except that:*
>
> *(1) In the coastal environment, natural wetlands must also be managed in accordance with the NZCPS, and*
>
> *(2) When managing the adverse effects of an activity on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers).*

51 With respect to the Clause (2) the section 42A report writer considers it appropriate to refer to the effects management hierarchy as it applies to indigenous biodiversity by application of ECO-P6 (of the non-freshwater parts of the PORPS) because this is "*more stringent*" than the approach adopted via the NPSFM.

52 The ECO provisions of the non-freshwater parts of the PORPS have been the subject of extensive evidence, from OceanaGold and other submitters. A particular criticism of these provisions is the effect of Appendices 3 and 4 (APP3 and APP4), which place limitations on when offsetting and compensation can be considered.

53 Under the notified drafting (and within the legal closing of the ORC) of APP3 and APP4, if certain impacts are to arise (e.g. the loss of any individuals of threatened taxa; and/or removal of its habitat), the activity is automatically 'ruled out' for offsetting or compensation. In other words, offsetting and compensation cannot be part of the environmental effects management matrix when specified species of conservation value or their habitat will be lost, even though the loss may be capable of being offset or compensated to produce a net gain for the species of interest.

54 Such limitations could, therefore, inadvertently preclude the ability to achieve good biodiversity outcomes in Otago through valid offsetting and compensatory means. However, it is these limits which the section 42A report writer prefers as they purport to “increase the stringency" and, therefore, in theory, increase the protection for biodiversity.

55 Mr Mark Christensen, on behalf of OceanaGold for the non-freshwater parts of the PORPS, provided evidence that it would be appropriate to amend APP3 and APP4 to set out the principles which offsetting and/or compensation proposals must be considered against. It aligns with the approach that has been adopted in the NPSFM and is a valid response as it enables proposals to be evaluated on their merits, including an assessment of the validity and appropriateness of any proposed offsetting or compensation measures.

56 Based on this evidence, I am unclear why the section 42A report writer considers it necessary to "increase the stringency" of this provision. Preventing or avoiding an activity also does not necessarily mean freshwater values will be protected, particularly within environments where wetlands and other habitats are already within a degraded state.

57 Based on this evidence, it is my view that clause (2) of this policy should be deleted (refer to Appendix B).

LF – FW – P10 – Restoring Natural Wetlands

58 OceanaGold submitted in partial support of this policy but sought some minor amendments to enhance its practical implementation. The section 42A report writer has recommended some further amendments to this policy, including replacing "where possible" with "to the greatest extent practicable" as follows:

> *Improve the ecosystem health, hydrological functioning, ~~water quality~~ and extent of natural wetlands that have been degraded or lost by requiring ~~where possible~~ to the greatest extent practicable:*
>
> *(1) An increase in the extent and ~~quality~~ condition of habitat for indigenous species,*

(2) The restoration of hydrological processes,

(3) Control of pest species and vegetation clearance, and

(4) The exclusion of stock

59 As set out above, it is uncertain how an applicant would be able to demonstrate that these matters have been achieved to the "greatest extent practicable". I also consider that given that the NPSFM provides a consenting pathway for certain activities to impact natural wetlands, these outcomes will not always be able to be achieved. I propose the following amendments to this provision to recognise these situations:

> *Where it is appropriate and can be practicably achieved, improve the ecosystem health, hydrological functioning, ~~water quality~~ and extent of natural wetlands that have been degraded or lost by requiring: ~~where possible to the greatest extent practicable~~:*

LF – FW – P15 – Stormwater and Wastewater Discharges

60 In response to OceanaGold's submission (and others) raising concerns regarding the notified text of LF-FW-P15 Stormwater and wastewater discharges, the section 42A report recommends that the policy be amended to focus on stormwater discharges only and a new policy *LF-FW-P16 – Discharges containing animal effluent, sewage, and industrial and trade waste* be introduced to give direction for other forms of wastewater discharge, as below.

> ***LF-FW-P16 – Discharges containing animal effluent, sewage, and industrial and trade waste***
> *Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to fresh water by:*
>
> *(1) phasing out existing discharges containing sewage or industrial and trade waste directly to water to the greatest extent possible,*
>
> *(2) requiring:*
>
> *(a) new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to fresh water,*

(b) discharges containing animal effluent to be to land,

(c) that all discharges containing sewage or industrial and trade waste are discharged into a reticulated wastewater system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for fresh water,

(d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring into reticulated wastewater systems,

(e) on-site wastewater systems and animal effluent systems to be designed and operated in accordance with best practice standards,

(f) that any discharges do not prevent water bodies from meeting any applicable water quality standards set for FMUs and/or rohe,

(3) to the greatest extent practicable, requiring the reticulation of wastewater in urban areas, and

(4) promoting source control as a method for reducing contaminants in discharges.

61 I generally agree that the approach recommended in the section 42A report improves on the notified provisions by providing separate policy directions for the different types of wastewater discharges (stormwater at LF-FW-P15 and other wastewater at LF-FW-P16).

62 I also consider that the revised drafting assists in improving the intent and application of the provisions, for example, it has been made clear that discharges to water must not prevent water bodies from meeting any applicable water quality standards set for the FMUs and/or rohe. As notified, the policy would arguably apply FMU- wide water quality standards to individual discharges and did not allow for reasonable mixing.

63 The new policy LF-FW-P16 requires the adverse effects of wastewater discharges to water to be minimised and, at (1), that discharges of sewage or industrial and trade waste be phased out "to the greatest extent possible".

64 I note that a minor amendment is appropriate with respect to the use of the phrase "where possible" in sub-clause (1) of LF-FW-P16. Paragraph 1548 of the section 42A report indicates that the policy is intended to follow the direction set by new objective LF-FW-O1A. That direction is for industrial and trade waste discharges to water to be phased out to the greatest extent "practicable". The section 42A author explains in paragraph 1548:

> *"The direction in my new recommended LF-FW-O1A is for discharges of wastewater to water bodies to be phased out to the greatest extent practicable. I consider that this recognises there will be some discharges which cannot be phased out – including some existing discharges which, perhaps for feasibility reasons, cannot be replaced by a discharge to land as well as some new discharges where the adverse effect of a discharge to land is demonstrably higher than a discharge to water. I recommend including clause (1) in LF-FW-P16 for existing discharges that reflects the direction in LF-FW-O1A..."*.

65 Given its inconsistency with the drafting of similar provisions, it appears that the phrase "where possible" in LF-FW-P16(1) may be a drafting error. I recommend that it be amended to "where practicable".

66 I also consider that the policy drafting would benefit from other minor edits to improve its application and grammatical sense. For example, the terms “fresh water”, “water” and water bodies” are used interchangeably throughout the policy. I think it would be appropriate to refer to ”waterbody” throughout as there may be situations where discharges of waste may go via an artificial water source (e.g. a tailing storage facility or a stormwater retention pond) prior to discharge to land and/or to a natural waterbody.

67 While phasing out direct discharges to natural waterbodies is a laudable goal, it would be appropriate in my view to change the language in (2) from “requiring” to “considering” or “having regard to”. Requiring is quite strong and while these are all matters that should be taken into account, they may not all necessarily be achieved to be able to improve discharge quality and adverse effects. I therefore think they would be better structured as a list of matters to be considered, or to have regard to by decision makers when determining whether a discharge to land or water is appropriate.

68 The edits I propose to this policy are shown below.

> ***LF-FW-P16 – Discharges containing animal effluent, sewage, and industrial and trade waste***
>
> *Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to natural water bodies ~~fresh water~~ by:*
>
> *(1) phasing out existing discharges containing sewage or industrial and trade waste directly to a natural water body ~~water~~ where this is ~~to the greatest extent possible~~ practicable,*
>
> *(2) ~~requiring~~ considering:*
>
> *(a) new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to a natural water body ~~fresh water~~,*
>
> *(b) discharges containing animal effluent to be to land,*
>
> *(c) that all discharges containing sewage or industrial and trade waste are discharged into a reticulated wastewater system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for fresh water,*
>
> *(d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring into reticulated wastewater systems,*
>
> *(e) on-site wastewater systems and animal effluent systems to be designed and operated in accordance with best practice standards,*
>
> *(f) that any discharges do not prevent water bodies from meeting any applicable water quality standards set for FMUs and/or rohe,*
>
> *(3) ~~to the greatest extent practicable, requiring~~ the reticulation of wastewater in urban areas, and*
>
> *(4) ~~promoting~~ the promotion of source control as a method for reducing contaminants in discharges.*

LF – LS – P18 – Soil Erosion

69 Oceana Gold seeks to amend the chapeau of the policy to include the phrase "to the extent practicable". OceanaGold considers that there is an element of practicability in implementing methods to minimise soil erosion, and that the policy should recognise this.

70 The section 42A report does not support OceanaGold's proposal to subject the full policy to a practicability test. This is because the author considers the notified wording provides flexibility for resource users to adopt practices based on the activity being undertaken.

71 The section 42A report goes on to say that the clause (1) of the policy describes what effective management practices are, in that they must retain top soil in-situ and minimize the potential for soil to be discharged to waterbodies. The author recommends the following addition to this clause:

> *Where vegetation removal is necessary or there is no vegetative cover implementing effective management practices to retain topsoil in-situ and minimize the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and*

72 I primarily have concerns with the reference to the requirement in this policy to "retain topsoil in-situ". I do not think it would be physically possible to retain soil in its original place (as I understand the term 'in-situ') if earthwork / soil disturbance activities are being undertaken. I also do not think that the changes which have been made by the author make grammatical sense with the chapeau of this policy, nor do they seem to make sense with the last part by referring to 'soil exposure'.

73 I consider that this clause should be amended as follows:

> *implementing effective management practices to ~~retain topsoil in-situ and~~ minimize the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and*

LF – LS – P21 – Land Use and Freshwater

74 OceanaGold is concerned that this policy (as notified) requires a reduction of contaminant discharges, regardless of whether those discharges are resulting in adverse effects or not.

75 The section 42A report writer agrees with submitters that there may be circumstances where it is not necessary to reduce discharges of contaminants to water, and circumstances where management of discharges may be more appropriate than their reduction or avoidance. I consider this amendment to be appropriate and support the following drafting of LF-LS-P21:

> ***LF – LS – P21 – Land Use and Freshwater***
>
> *The health and wellbeing of water bodies is maintained, or if degraded, improved to meet environmental outcomes set for Freshwater Management Units and/or rohe by:*
>
> *(1) Reducing or otherwise managing the adverse effects of direct and indirect discharges of contaminants to water from the use an development of land,*
>
> *(2) Managing land uses that may have adverse effects on the flow of water in surface water bodies or the recharge of groundwater, and*
>
> *(3) Maintaining, or where degraded, enhancing the habitats and biodiversity values of riparian margins.*

CONCLUSION

76 OceanaGold manages water within its mining operations at Macraes. It forms an essential component in the mining process, and also needs to be carefully managed so that the works can occur in a manner which does not cause adverse effects on downstream water quality and aquatic ecosystems.

77 The Macraes site and the consented activities which allow interaction with, and alteration of existing waterbodies mean that there are practical limitations to being able to fully restore these to their natural form and function, particularly while the mine is operational and within the term of the

PORPS. However, these activities occur within appropriate limits and provide protection for downstream water quality and aquatic ecology as described by Dr Ryder (which is attached to Ms Clarke's evidence). He also acknowledges that there is always an ability to improve and enhance these features, which accords with the outcomes specified in the NPSFM.

78 The PORPS therefore needs to provide a framework to enable existing activities to continue, and pathways to seek improvement of freshwater resources where this can be practicably and meaningfully achievable in step with the obligations inherent within the NPSFM. Considering this, I have identified a number of provisions where I consider that further amendments are necessary to enable such outcomes to be achieved via the PORPS.

79 My recommendations in respect of the provisions are recorded in the table attached as **Appendix B** to this statement of evidence.

Claire Hunter

28 June 2023

APPENDIX A

Summary of Recent Experience of Claire Hunter

- Fortescue Future Industries – Southern Green Hydrogen Plant – Advice on the feasibility of a site for a hydrogen production plant.
- Willowridge Developments Limited – prepared and presented evidence in the Environment Court for an earthworks plan change being proposed by the Otago Regional Council, which sought to only impose limits on earthworks on residential sites.
- Bathurst Resources Limited, Canterbury Coal Mine – Assisted in the peer review of current applications and process and provided advice in terms of strategy going forward. Preparation of section 92 responses to Environment Canterbury as part of the regional council consents being sought. Ongoing planning advice and liaison with regulatory authorities regarding the Canterbury Coal Mine closure plans. Preparation of additional consents and addendum Assessment of Environmental Effects. Preparation and presentation of evidence at the hearing and involvement in the Environment Court mediation that has followed.
- OceanaGold – Involved in various projects relating to OceanaGold's Waihi and Macraes sites, including potential new development opportunities. Presented planning evidence at the Deepdell North Stage 3 hearing which was granted consent in 2020. Currently the lead planning consultant on various new developments being progressed at the Macraes site in the Waitaki District. Also advising OceanaGold on various planning issues relating to the Otago region.
- OceanaGold – Planning advice and preparation of submissions and further submissions on the Proposed Otago Regional Policy Statement 2021. Provision of planning evidence during the hearings.
- Contact Energy – Planning advice and preparation of submissions and further submissions on the Proposed Otago Regional Policy Statement 2021. Provision of planning evidence during the hearings.
- Contact Energy – Provision of advice regarding a section 128 review of conditions on its Clutha Hydro Scheme consent relating to landscape and visual amenity. Proffered revised conditions which were approved by the Otago Regional Council as being successful in addressing the issue.
- Contact Energy – Preparation of dredging consents to enable sediment removal from within the Bannokburn Inlet. Involved in consultation with key stakeholders and the Councils.

- Contact Energy – Providing strategic and planning advice to Contact Energy on its proposal to develop a wind farm in Southland (current 2023).
- Alliance Group Limited – Planning advice and preparation of applications with regard to the renewal of key discharge consents (water, land and air) for its Lorneville Plant.
- Alliance Group Limited – Review of Canterbury Proposed Regional Air Plan, preparation of submission and evidence.
- Alliance Group Limited – Review of various Southland Regional and District Plan changes and preparation of submissions. Participation in Environment Court mediation to resolve Alliance Group Limited's appeal on the Southland Proposed District Plan.
- Alliance Group Limited – Preparation of resource consent application for the renewal of its Mataura Plant's hydroelectric power scheme.
- Alliance Group Limited – Preparation of statutory assessment to accompany resource consent application to renew its Pukeuri Plant biosolids discharge consent.
- Aurora Energy Limited – Successfully obtained a resource consent and subdivision for a new large-scale substation in Camp Hill, Hawea. Claire's involvement in this project followed an earlier application which was declined by Hearing Commissioners due to its controversial location in Hawea.
- Wellington International Airport Limited – Management of technical inputs and reports for the proposed runway extension, preparation of regional and district council resource consent applications.
- Wellington International Airport Limited – Preparation of advice and submissions on the Greater Wellington Proposed Natural Resources Plan. Active involvement in preparing evidence for the various hearing streams on behalf of Wellington International Airport Limited.
- Wellington International Airport Limited – Lead author of the main site and eastern site notice of requirements.
- Wellington International Airport Limited – Provision of planning advice and preparation of submissions and further submissions on Plan Change 1 to the Wellington Regional Policy Statement.
- Liquigas Limited – Preparation of submissions and planning evidence on the Second-Generation Dunedin City Plan in order to protect the existing and proposed operational capacity of its LPG Terminal in Dunedin.

- Liquigas Limited – Reconsenting of its significant South Island LPG Terminal located at Port Otago, Dunedin. The application sought to increase the storage of LPG significantly at the site and was processed as a non-notified consent.
- Environmental Protection Authority – NZTA Expressway between MacKays Crossing to Peka Peka, Kapiti Coast project; Transmission Gully project plan change and notices of requirements and resource consents – Assisting in the review and section 42A report writing for the notice of requirement and various consents required.
- Ravensdown Fertiliser Limited – Preparation of regional council resource consents (air and coastal discharges) to enable the ongoing operation of the Plant in Ravensbourne in Dunedin City. Recently engaged to reconsent the Plant in 2025.
- Queenstown Airport Corporation – Provision of resource management advice for the airport and its surrounds, in particular, the runway end safety area extension and preparation of the notice of requirement, gravel extraction applications to both regional and district councils and other alterations required to the aerodrome designation.
- LPG Association of New Zealand Limited – Preparation of evidence and hearing attendance representing the LPGA with respect to Dunedin City Council's Plan Change 13 – Hazardous Substances, and participation in mediation to resolve LPGA appeal.
- LPG Association of New Zealand Limited – Preparation of planning evidence on the Second-Generation Dunedin City Plan.
- Invercargill Airport Limited – Preparation of plan change provisions and section 32 analysis to provide for the future growth and expansion of Invercargill Airport in the Invercargill District Plan.
- Invercargill Airport Limited – Preparation of notices of requirement to amend a number of existing designations in the Invercargill District Plan including obstacle limitation surfaces and the aerodrome.
- Southdown Holdings Ltd – Preparation of proposed conditions of consent for large scale irrigation in the Upper Waitaki catchment, Canterbury.
- Trustpower Limited – Review of Otago Regional Council Plan Change 6A and preparation of submissions and evidence at the hearing on behalf of Trustpower Limited. Participation in Environment Court mediation to resolve issues.
- Trustpower Limited – Review of Clutha District Plan Energy Generation Plan Change and preparation of submissions and evidence at the hearing on behalf of Trustpower Limited.

- Trustpower Limited – preparation of proposed conditions of consent for the Wairau Hydroelectric Power Scheme.
- Trustpower Limited – management of the necessary technical inputs, consultation and preparation of resource consents necessary to enable the ongoing operation of the Wahapo Hydroelectric Scheme on the West Coast, South Island.
- Meridian Energy Limited – Preparation of the regional and district council consents for the Proposed Project Hayes Wind Farm in Central Otago.
- Meridian Energy Limited – Preparation of the regional and district council consents for the Proposed Mokihinui Hydro Scheme on the West Coast, South Island.
- SouthPort Limited – Prepared and presented evidence on behalf of SouthPort Limited in regards to proposed plan changes to the Invercargill District Plan.

Appendix B – Oceana Gold's specific submissions on PORPS freshwater provisions – Post s42A Report Amendments

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
SRMR-I5 – Freshwater demand exceeds capacity in some places	Support	The explanation to this issue identifies that there are environmental, economic and social impacts from freshwater abstraction. It is important that any amendments to this issue recognise and provide for the economic benefits of use when allocating resources.	No amendments sought.	SRMR–I5 – Freshwater demand exceeds capacity in some places. […] Economic Freshwater in the Otago region is a factor of production that directly contributes to human needs (~~urban~~ water supply) ~~agriculture~~ primary production, industry, and hydro-electric power supply, ~~and mineral extraction~~. Freshwater also indirectly contributes to the tourism industry through maintenance of freshwater assets for aesthetic and commercial recreational purposes. Lack of freshwater can negatively impact economic output of those industries that rely on water in the production process. To varying degrees these impacts can be mitigated through water efficiency measures and innovation. At the same time other industries, such as tourism that rely on the aesthetic characteristic of rivers and lakes, do not have such opportunities available to them and instead rely on management regimes that sustain flows and water levels suitable for their activities.	No further amendments required. Accept the analysis provided in paragraphs [552] and [554] of the s42A report regarding the reference to "industry" and that water storage is addressed in new policy LF-FW-P7A.
SRMR-I6 – Declining water quality has adverse effects on the environment, our communities, and the economy	Support	The explanation to this issue identifies that there are environmental, economic and social impacts and components to declining water quality. It is important that any amendments to this issue continue to take these into account, and recognise that matters to address declining water quality may have consequential effects. For example, reducing the number or amount of discharges which are direct to water may lead to an increased number or amount of discharges to land.	No amendments sought.	SRMR–I6 - Declining water quality has adverse effects on the environment, our communities, and the economy. Statement While the pristine areas of Otago generally maintain very good water quality, some areas of Otago demonstrate poorer quality and declining trends in water quality which can often be attributed to discharges from land use intensification (both rural and urban) and land management practices. Erosion, run-off and soil loss can lead to sediment and nutrients being deposited into freshwater bodies resulting in declining water quality. Context The health of water is vital for the health of the environment, people and the economy. It is at the heart of culture and identity. Nationally, and in parts of Otago, freshwater is facing significant pressure. Population growth and land-use intensification in urban and rural environments has impacted the quality of	No further amendments required.

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
				water, increasing contamination from nutrients and sediment. Water quality affects a wide range of environmental health factors, human health and survival needs, and cultural, social, recreational, and economic uses. Some of the biggest impacts on water quality in Otago are considered to come from agriculture and urbanisation, through diffuse discharges and point source discharges. On 3 September 2020, new National Environmental Standards (NESF) and a new National Policy Statement (NPSFM) came into force to make immediate improvements ~~to improve~~ water quality within five years; and reverse past ~~damage~~ degradation and bring New Zealand's freshwater resources, waterways and ecosystems to a healthy state within a generation. Impact snapshot Environmental Despite the region's lakes and rivers being highly valued by Otago communities, reports indicate that in many areas there are reasons for concern about water quality and its trends with consequent potential impact on ecosystems and people. Water quality across Otago is variable. River water quality is best at river and stream reaches located at high or mountainous elevations under predominantly native vegetation cover, and mostly good in the upper areas of large river catchment and outlets from large lakes. Water quality is generally poorer in smaller low-elevation streams and coastal shallow lakes where they receive water from upstream pastoral areas or urban catchments. For example, catchments such as the Waiareka Creek, Kaikorai Stream, and the lower Clutha catchment, have some of the worst water quality in the region; Otago's central lakes are impacted by increased population, urban development and tourism demand; other areas, such as urban streams in Dunedin, intensified catchments in North Otago and some tributaries, also have poor water quality. Between 2006 and 2017, trends in a number of water quality parameters were worsening. For E. coli, for example, 30% of sites had a probable or significant worsening trend	

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
				compared to 7% of sites that had either stable or improving trends. In urban streams in Dunedin, intensified catchments in North Otago and some tributaries of the ~~Pomahaka~~ Pomāhaka, E. coli was the worst performing variable. In many cases, the specific source of contamination is unknown. There are many different types and sizes of lakes in Otago. ORC monitors water quality in lakes, of which eight have generally shown good water quality. There have been concerns within the community about the quality of water in Lakes Wānaka, Whakatipu Waimāori/Lake Wakatipu and Lake Hayes. Groundwater quality also varies across the region, with some areas having elevated E. coli and nitrate concentrations above the NZ Drinking Water Standards. The main areas with elevated nitrate concentrations are North Otago and the Lower Clutha. Some bores across the region have exceeded the drinking water standards for E. coli; highlighting localized problems, likely due to inadequate bore head security. In addition to human sources of poorer groundwater quality, low groundwater quality from natural or geologic sources may also affect the potability of bore water throughout Otago (e.g. naturally occurring arsenic or boron concentrations found in bores associated with particularly geologies). Stock entering water bodies can lead to pugging and destruction of riparian soils and beds that play an important role in filtering contaminants, as well as excreting directly in waterways. The growing practice of wintering cattle in Otago can exacerbate leaching effects, which may not connect to surface water until spring, creating spikes in nutrient loads. Sediment is a key issue for freshwater quality throughout Otago, including coastal estuaries where it can significantly impact the life supporting capacity of waterways. Urban development is a key generator of sediment input to lakes and rivers in Central Otago, from building platforms and from stormwater contamination. Activities such as agricultural land use ~~intensification~~, mining, and forestry also contribute.	

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
				Agricultural land use ~~intensification~~ also contributes to nutrients (nitrogen and phosphorus) leaching into underlying groundwater or running off into surface water bodies, and can also increase the risk of E.coli contamination from animal waste. Urban environmental contaminants include hydrocarbons, and metals from roads and structures. They often wash into urban stormwater systems and pass unfiltered into water bodies, or the coastal marine area. Stormwater effects, particularly in urban areas, are poorly understood. Wastewater and stormwater systems may not be adequate in some places due to aging infrastructure, rapid growth pressure, or insufficient investment in replacement or upgrades. Overflows of wastewater (sewage and waste products) create significant risks for water quality. These can enter the environment either directly or through stormwater systems, particularly in flood events. Economic Water pollution (from nutrients, chemicals, pathogens, ~~and~~ sediment and other contaminants) can have far-reaching effects potentially impacting tourism, property values, commercial fishing, recreational businesses, and many other sectors that depend on clean water. These impacts can be direct (varying the quality of primary production outputs such as fish); increasing costs of production through mitigation or remediation costs (drinking water treatment cost, riparian restoration); loss of enjoyment and benefit from tourism uses, and indirect such as cost to human health and associated medical costs, or reduction in brand value (e.g. Brand New Zealand). Social For the wider community, water is a source of kai ~~and~~ for harvesting and food production. Water is also a source of recreation, including swimming, fishing and water sports. There are multiple dimensions to the way water quality impacts on peoples' interaction with water bodies, including environmental, health, landscape, and aesthetic factors. Otago's rivers, lakes, estuaries and bays are important destinations for recreational use including swimming, fishing and water sports. Eighty-two per cent of Otago's rivers and lakes are swimmable. Where water quality cannot support these	

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
				activities, the lifestyle of those living in Otago is impacted. Degraded water quality reduces the mauri of the water and the habitats and species it supports, therefore also negatively affecting mahika kai and taoka species and places. This constitutes a loss of Kāi Tahu culture, affecting the intergenerational transfer of knowledge handed down from tūpuna over hundreds of years; and it culminates in a loss of rakatirataka and mana.	
LF-WAI-O1 Te Mana o te Wai The mauri of Otago's water bodies and their health and well-being is protected, and restored where it is degraded, and the management of land and water recognises and reflects that: (1) water is the foundation and source of all life – na te wai ko te hauora o ngā mea katoa, (2) there is an integral kinship relationship between water and Kāi Tahu whānui, and this relationship endures through time, connecting past, present and future, (3) each water body has a unique whakapapa and characteristics, (4) water and land have a connectedness that supports and perpetuates life, and (5) Kāi Tahu exercise rakatirataka, manaakitaka and their kaitiakitaka duty of care and attention over wai and all the life it supports.	Support in part and amend.	OceanaGold would like to see this objective amended to promote the protection - or where degraded, improvement – of significant water resources so that there is improved consistency with 'Te mana o te Wai' as set out in the NPSFM.	"The mauri of Otago's water bodies and their health and well-being is protected, and ~~restored~~ improved where it is degraded …"	LF–WAI–O1 – Te Mana o te Wai The mauri of Otago's water bodies and their health and well-being is protected, and restored where it is degraded, and the management of land and water recognises and reflects that: (1) water is the foundation and source of all life – na te wai ko te hauora o ngā mea katoa, (2) there is an integral kinship relationship between water and Kāi Tahu whānui, and this relationship ~~endures through time, connecting~~ connects past, present and future, (3) each water body has a unique whakapapa and characteristics, (4) fresh water, land and coastal water ~~land~~ have a connectedness that supports and perpetuates life, ~~and~~ (5) protecting the health and well-being of water protects the wider environment and the mauri of water, (6) Kāi Tahu exercise rakatirataka, manaakitaka and their kaitiakitaka duty of care and attention over wai and all the life it supports. (7) all people and communities have a responsibility to exercise stewardship, care, and respect in the management of fresh water.	Amend as follows: The mauri of Otago's water bodies and their health and well-being is protected, and ~~restored~~ improved where it is degraded, and the management of land and water recognises and reflects that: Or alternatively delete this provision on the basis that Te Mana o te Wai is already set out in the NPSFM and the PORPS needs to set out how it will be achieved in this region. In many respects the how is achieved via the visions and management section and FMU parts of the PORPS, and this objective is not necessary.
LF-WAI-P1- Prioritisation In all management of fresh water in Otago, prioritise: (1) first, the health and well-being of water bodies and freshwater ecosystems, te	Oppose in part and amend.	OceanaGold submits that this policy should be amended to provide clarity on priorities where there is a conflict between them e.g. housing development and water needed for drinking	Amendments to give effect to the submission.	**LF–WAI–P1 – Prioritisation** In all decision-making affecting ~~management of~~ fresh water in Otago, prioritise: (1) first, the health and well-being of water bodies and freshwater ecosystems, (te	Delete this provision as it is replicating the NPSFM.

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
hauora o te wai and te hauora o te taiao, and the exercise of mana whenua to uphold these, (2) second, the health and well-being needs of people, te hauora o te tangata; interacting with water through ingestion (such as drinking water and consuming harvested resources) and immersive activities (such as harvesting resources and bathing), and (3) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.		water with potential effects on the health and wellbeing of a water body.		hauora o te wai) and the contribution of this to the health and well-being of the environment (te hauora o te taiao)~~, and~~ together with the exercise of mana whenua to uphold these, (2) second, ~~the~~ health ~~and well-being~~ needs of people, (te hauora o te tangata); interacting with water through ingestion (such as drinking water and consuming ~~harvested~~ resources harvested from the water body) and immersive activities (such as harvesting resources and primary contact~~bathing~~), and (3) third, the ability of people and communities to provide for their social, economic, and cultural wellbeing, now and in the future.	
LF-VM-P6 – Relationship between FMUs and rohe Where rohe have been defined within FMUs: (1) environmental outcomes must be developed for the FMU within which the rohe is located, (2) if additional environmental outcomes are included for rohe, those environmental outcomes: (a) set target attribute states that are no less stringent than the parent FMU environmental outcomes if the same attributes are adopted in both the rohe and the FMU, and (b) may include additional attributes and target attribute states provided that any additional environmental outcomes give effect to the environmental outcomes for the FMU, (3) limits and action plans to achieve environmental outcomes may be developed for the FMU or the rohe or a combination of both, (4) any limit or action plan developed to apply within a rohe: (a) prevails over any limit or action plan developed for the FMU for the same attribute, unless explicitly stated to the contrary, and	Support in part and amend.	OceanaGold submits that amendments are required to ensure this policy reflects the requirements of the NPS-FM.	Amendments to give effect to the submission.	**LF–VM–P6 – Relationship between FMUs and rohe** Where rohe have been defined within FMUs: (1) environmental outcomes must be developed for the FMU within which the rohe is located, (2) ~~if~~ any additional rohe-specific environmental outcomes ~~are included for rohe, those environmental outcomes~~: (a) must set target attribute states that are no less stringent than the parent FMU environmental outcomes if the same attributes are adopted in both the rohe and the FMU, and (b) may include additional attributes and target attribute states provided that any additional environmental outcomes give effect to the environmental outcomes for the FMU, (3) limits and action plans to achieve environmental outcomes, including by achieving target attribute states, may be developed for the FMU or the rohe or a combination of both, (4) any limit or action plan developed to apply within a rohe: (a) prevails over any limit or action plan developed for the FMU for the same	No further amendments required.

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
(b) must be no less stringent than any limit set for the parent FMU for the same attribute, and (c) must not conflict with any limit set for the underlying FMU for attributes that are not the same, and (5) the term "no less stringent" in this policy applies to attribute states (numeric and narrative) and any other metrics and timeframes (if applicable).				attribute, unless explicitly stated to the contrary, and (b) must be no less stringent than any limit or action plan set for the parent FMU for the same attribute, and (c) must not conflict with any limit set or action plan developed for the ~~underlying~~ parent FMU for attributes that are not the same, and (5) the term "no less stringent" in this policy applies to attribute states (numeric and narrative) and any other metrics and timeframes (if applicable).	
LF-VM-O3 – North Otago FMU vision By 2050 in the North Otago FMU: (1) fresh water is managed in accordance with the LF–WAI objectives and policies, while recognising that the Waitaki River is influenced in part by catchment areas within the Canterbury region, (2) the ongoing relationship of Kāi Tahu with wāhi tūpuna is sustained and Kāi Tahu maintain their connection with and use of the water bodies, (3) healthy riparian margins, wetlands, estuaries and lagoons support thriving mahika kai, indigenous habitats and downstream coastal ecosystems, (4) indigenous species can migrate easily and as naturally as possible to and from the coastal environment, (5) land management practices reduce discharges of nutrients and other contaminants to water bodies so that they are safe for human contact, and (6) innovative and sustainable land and water management practices support food production in the area and improve resilience to the effects of climate change.	Support in part and amend.	A focus on natural migration does not provide for trap and transfer which can be an effective option for providing for migration. Water body is defined in s 2 RMA as "means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area". To avoid any suggestion that this includes pit lakes or water which form on top of tailings dams, which are not intended for contact recreation or stock drinking, and may be fenced off, OceanaGold suggests an amendment to exclude these from the higher water quality standards.	(4) provision is made for indigenous species ~~can~~ to migrate easily ~~and as naturally as possible~~ to and from the coastal environment, (5) land management practices reduce discharges of nutrients and other contaminants to water bodies so that where water bodies are intended for human contact ,they are safe for human contact, and …	**LF – VM – O3 – North Otago FMU Vision** By 2050 in the North Otago FMU: (1) Management recognises that the Waitaki River is influenced in part by catchment areas within the Canterbury Region; (2) Healthy riparian margins, wetlands, estuaries and lagoons support the health of downstream coastal ecosystems.	No further amendments required.
New Objective				**LF-FW-O1A – Region-wide objective for fresh water** In all FMUs and rohe in Otago and within the timeframes specified in the *freshwater* visions in LF-VM-O2 to LF-VM-O6:	Amend as follows: **LF-FW-O1A – Region-wide objective for fresh water**

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
				(1) healthy *freshwater* ecosystems support healthy populations of indigenous species and *mahika kai* that are safe for consumption, (2) the interconnection of *land*, *freshwater* (including *groundwater*) and *coastal water* is recognised, (3) indigenous species migrate easily and as naturally as possible, (4) the natural character, including form and function, of *water bodies* reflects their natural behaviours to the greatest extent practicable, (5) the ongoing relationship of Kāi Tahu with *wāhi tūpuna*, including access to and use of *water bodies*, is sustained, (6) the health of the *water* supports the health of people and their connections with *water bodies*, (7) innovative and sustainable *land* and *water* management practices provide for the health and well-being of *water bodies* and *freshwater* ecosystems and improve resilience to the *effects* of *climate change*, and (8) direct *discharges* of *wastewater* to *water bodies* are phased out to the greatest extent practicable.	In all FMUs and rohe in Otago and within the timeframes specified in the *freshwater* visions in LF-VM-O2 to LF-VM-O6: (1) healthy *freshwater* ecosystems support healthy populations of indigenous species and *mahika kai* that are safe for consumption, (2) the interconnection of *land*, *freshwater* (including *groundwater*) and *coastal water* is recognised, (3) ~~indigenous species migrate easily and as naturally as possible~~ appropriate provision is made for indigenous species to migrate to and from the coastal environment, (4) where practicable, the natural character, including form and function, of *water bodies* reflects their natural behaviours ~~to the greatest extent practicable,~~ (5) the ongoing relationship of Kāi Tahu with *wāhi tūpuna*, including access to and use of *water bodies*, is sustained, (6) the health of the *water* supports the health of people and their connections with *water bodies*, (7) innovative and sustainable *land* and *water* management practices provide for the health and well-being of *water bodies* and *freshwater* ecosystems and improve resilience to the *effects* of *climate change*, and (8) where practicable direct *discharges* of *wastewater* to *water bodies* are phased ~~out to the greatest extent practicable~~.
LF-FW-O8 – Fresh water In Otago's water bodies and their catchments: (1) the health of the wai supports the health of the people and thriving mahika kai, (2) water flow is continuous throughout the whole system, (3) the interconnection of fresh water (including groundwater) and coastal waters is recognised,		It is unclear what is meant by "continuous" and whether this concept provides for diversions and dams which are commonly employed across the Otago region. An amendment is sought to provide for continuous water flow "where practicable". Sub-paragraph (4) refers to migration occurring "easily and as naturally as possible". This does not provide for trap and transfer, although requires intervention and is not natural, can be very effective at providing for migration.	LF-FW-O8 – Fresh water In Otago's water bodies and their catchments: (1) the health of the wai supports the health of the people and thriving mahika kai, (2) where practicable, water flow is continuous throughout the whole system, (3) the interconnection of fresh water (including groundwater) and coastal waters is recognised,	Delete LF-FW-O8.	No further amendments required.

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(4) native fish can migrate easily and as naturally as possible and taoka species and their habitats are protected, and (5) the significant and outstanding values of Otago's outstanding water bodies are identified and protected.		An amendment is also proposed to requirement maintenance and enhancement as opposed to protection of habitats.	(4) native fish migration is provided for and the values of their habitat are maintained and enhanced ~~can migrate easily and as naturally as possible and taoka species and their habitats are protected~~, and (5) the significant and outstanding values of Otago's outstanding water bodies are identified and protected.		
LF-FW-O9 – Natural wetlands Otago's natural wetlands are protected or restored so that: (1) mahika kai and other mana whenua values are sustained and enhanced now and for future generations, (2) there is no decrease in the range and diversity of indigenous ecosystem types and habitats in natural wetlands, (3) there is no reduction in their ecosystem health, hydrological functioning, amenity values, extent or water quality, and if degraded they are improved, and (4) their flood attenuation capacity is maintained.	Oppose in part and amend.	OceanaGold would like to see this objective amended to promoting the restoration, rather than restoration as an absolute objective. This will ensure better consistency with the NPS-FM. It is also unclear in (1) what the "range" or values is, what needs to be enhanced, to what level and what the endpoint of enhancement is? It is submitted that the desire to see no decrease in the range and diversity of indigenous ecosystem types and habitats, or health etc are unachievable. Even without any intentional drainage or removal of wetlands, climatic conditions (including as a result of long-term climate change) and pest problems will see effects and this needs to be acknowledged in this objective. Similarly, in (3) it is unclear what end point there is for improvement or why amenity values has been included in this objective.	"Otago's natural wetlands are protected, improved or restored so that:" OceanaGold would also like to see further amendments address it's concerns.	**LF–FW–O9 – Natural wetlands** Otago's natural wetlands are protected or restored so that: (1) mahika kai and other mana whenua values are sustained and enhanced now and for future generations, (2) there is no net decrease, and preferably an increase, in the extent ~~range~~ and diversity of indigenous ecosystem types and habitats in natural wetlands, (3) there is no reduction and, where degraded, there is an improvement in ~~their~~ wetland ecosystem health, hydrological functioning, amenity values, extent or water quality~~, and if degraded they are improved,~~ and (4) their flood attenuation and water storage capacity is maintained or improved.	Amend as follows: **LF–FW–O9 – Natural wetlands** Otago's natural wetlands are protected or restored so that: (1) mahika kai and other mana whenua values are sustained and enhanced now and for future generations, (2) there is no net decrease, and preferably ~~an net~~ an increase, in the extent of natural wetlands and in the extent ~~and~~ diversity of indigenous ecosystem types and habitats in natural wetlands, (3) ~~there is no reduction and, where degraded, there is an~~ where appropriate there is an improvement in wetland ecosystem health, hydrological functioning, amenity values~~, extent~~ or water quality, and if applicable their flood attenuation and water storage capacity is maintained or improved.
LF-FW-P7 – Fresh water Environmental outcomes, attribute states (including target attribute states) and limits ensure that: (1) the health and well-being of water bodies is maintained or, if degraded, improved, (2) the habitats of indigenous species associated with water bodies are protected, including by providing for fish passage, (3) specified rivers and lakes are suitable for primary contact within the following timeframes: (a) by 2030, 90% of rivers and 98% of lakes, and	Oppose in part and amend.	The drafting of this policy is too absolute and could mean that the environmental outcomes, attribute states and limits must protect any habitat of a single (or multiple) indigenous plant or animal that is associated with a water body, whether in it or near it.	Environmental outcomes, attribute states (including target attribute states) and limits ensure that: (1) the health and well-being of water bodies is maintained or, if degraded, improved, (2) the habitats of significant indigenous species associated with water bodies are maintained and enhanced~~protected~~, including by providing for fish passage,	**LF–FW–P7 – Fresh water** Environmental outcomes, attribute states (including target attribute states), environmental flows and levels, and limits ensure that: (1) the health and well-being of water bodies is maintained or, if degraded, improved, (2) the habitats of indigenous freshwater species ~~associated with water bodies~~ are protected and sustained, including by providing for fish passage, (2A) the habitats of trout and salmon are protected insofar as this is consistent with (2),	No further amendments required.

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(b) by 2040, 95% of rivers and 100% of lakes, and (4) mahika kai and drinking water are safe for human consumption, (5) existing over-allocation is phased out and future over-allocation is avoided, and (6) fresh water is allocated within environmental limits and used efficiently.				(3) specified rivers and lakes are suitable for primary contact within the following timeframes: (a) by 2030, 90% of rivers and 98% of lakes, and (b) by 2040, 95% of rivers and 100% of lakes, and (4) resources harvested from water bodies including mahika kai and drinking water are safe for human consumption, (5) existing over-allocation is phased out and future over-allocation is avoided~~, and~~ ~~(6) fresh water is allocated within environmental limits and used efficiently~~.	
New policy				**LF-FW-P7A – Water allocation and use** Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by: (1) allocating fresh water efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for: (a) community drinking water supplies, (b) renewable electricity generation, and (c) land-based primary production, (2) ensuring that no more fresh water is abstracted than is necessary for its intended use, (3) ensuring that the efficiency of freshwater abstraction, storage, and conveyancing infrastructure is improved, including by providing for off-stream storage capacity, and (4) providing for spatial and temporal sharing of allocated fresh water between uses and users where feasible.	Amend this policy as follows: **LF-FW-P7A – Water allocation and use** Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by: (1) allocating fresh water efficiently to support the social, economic, and cultural well-being of people and communities ~~to the extent possible within limits,~~ including for: (a) community drinking water supplies, (b) renewable electricity generation, and (c) ~~land-based~~ primary production, (2) ensuring that no more fresh water is abstracted than is necessary for its intended use, (3) ensuring that the efficiency of freshwater abstraction, storage, and conveyancing infrastructure is improved, including by providing for off-stream storage capacity, and (4) providing for spatial and temporal sharing of allocated fresh water between uses and users where feasible.
LF-FW-P9 – Protecting Natural Wetlands Protect natural wetlands by:	Oppose and amend.	OceanaGold understands that this policy is to give effect to the National Policy Statement for Freshwater Management 2020 and the Regulations relating to	Amend the policy to recognise that changes to the NESFW are imminent and provide a broader scope of opportunity	**LF–FW–P9 – Protecting natural wetlands** Protect natural wetlands by implementing clause 3.22(1) to (3) of the NPSFM, except that:	Amend to delete sub-clause (2) as follows: **LF–FW–P9 – Protecting natural wetlands**

Provision	Position	Reasons	Relief sought (or other such similar outcome that has the same effect as the relief sought)	S42A Recommended Text	Claire Hunter Recommendation and Reasons
1. avoiding a reduction in their values or extent unless: (a) the loss of values or extent arises from: i. the customary harvest of food or resources undertaken in accordance with tikata Maori, ii. restoration activities, iii. scientific research, iv. the sustainable harvest of sphagnum moss v. the construction or maintenance of wetland utility structures, vi. the maintenance of operation of specific infrastructure, or other infrastructure, vii. natural hazards works, or (b) the Regional Council is satisfied that: i. the activity is necessary for the construction or upgrade of specified infrastructure, ii. the specified infrastructure will provide significant natural or regional benefits, iii. there is a functional need for the specified infrastructure in that location, iv. the effects of the activity on indigenous biodiversity are managed by applying either ECO-P3 or ECO-P6 (whichever is applicable), and v. the other effects of the activity (excluding those managed under (1)(b)(iv)) are managed by applying the effects management hierarchy, and 2. not granting resource consents for activities under (1)(b) unless the Regional Council is satisfied that: (a) the application demonstrates how each step of the effects management hierarchies in (1)(b)(iv) and (1)(b)(v) will		Freshwater Management (NESFW). However, OceanaGold is concerned that this policy does not provide a consenting pathway for other activities which are also locationally or functionally constrained such as mining activities. This matter has been raised with regard to these higher order national documents and OceanaGold has written confirmation on behalf of the Minister for the Environment (a copy of which has been provided to the ORC), that industries such as quarries, waste management and mining have a clear case for providing a consenting pathway for these sectors through the national freshwater regulations relating to wetlands. This correspondence further advised that the Government accepts that there are constraints on where these activities/operations can be located, and that they provide necessary materials or services. OceanaGold understands that the Government will initiate amendments to the regulations to provide a consenting pathway for mining activities as a result of this. It is likely that mining activities would be treated in the same or similar way as 'specified infrastructure'. This would mean that mining activities would be able to apply the effects management hierarchy. This is considered to be appropriate and has been shown to be successful in the recently consented Deepdell North Stage III project where the management hierarchy was adopted and positive environmental outcomes will arise as a result.	for activities such as mining to access the effects management hierarchy.	(1) in the coastal environment, natural wetlands must also be managed in accordance with the NZCPS, and (2) when managing the adverse effects of an activity on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers). ~~Protect natural wetlands by:~~ ~~(1) avoiding a reduction in their values or extent unless:~~ ~~(a) the loss of values or extent arises from:~~ ~~(i) the customary harvest of food or resources undertaken in accordance with tikaka Māori,~~ ~~(ii) restoration activities,~~ ~~(iii) scientific research,~~ ~~(iv) the sustainable harvest of sphagnum moss,~~ ~~(v) the construction or maintenance of wetland utility structures,~~ ~~(vi) the maintenance of operation of specific infrastructure, or other infrastructure,~~ ~~(vii) natural hazard works, or~~ ~~(b) the Regional Council is satisfied that:~~ ~~(i) 0the activity is necessary for the construction or upgrade of specified infrastructure,~~ ~~(ii) the specified infrastructure will provide significant national or regional benefits,~~ ~~(iii) there is a functional need for the specified infrastructure in that location,~~ ~~(iv) the effects of the activity on indigenous biodiversity are managed by applying either ECO–P3 or ECO–P6 (whichever is applicable), and~~ ~~(v) the other effects of the activity (excluding those managed under (1)(b)(iv)) are managed by applying~~	Protect natural wetlands by implementing clause 3.22(1) to (3) of the NPSFM, except that: ~~(1)~~ in the coastal environment, natural wetlands must also be managed in accordance with the NZCPS~~, and~~ ~~(2) when managing the adverse effects of an activity on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers)~~.

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be applied to the loss of values or extent of the natural wetland, and (b) any consent is granted subject to conditions that apply for the effects management hierarchies in (1)(b)(iv) and (1)(b)(v).				~~the effects management hierarchy, and~~ ~~(2) not granting resource consents for activities under (1)(b) unless the Regional Council is satisfied that:~~ ~~(a) the application demonstrates how each step of the effects management hierarchies in (1)(b)(iv) and (1)(b)(v) will be applied to the loss of values or extent of the natural wetland, and~~ ~~(b) any consent is granted subject to conditions that apply the effects management hierarchies in (1)(b)(iv) and (1)(b)(v).~~	
LF-FW-P10 Improve the ecosystem health, hydrological functioning, water quality and extent of natural wetlands that have been degraded or lost by requiring, where possible: (1) an increase in the extent and quality of habitat for indigenous species, (2) the restoration of hydrological processes, (3) control of pest species and vegetation clearance, and (4) the exclusion of stock.	Support in part and amend.	OceanaGold supports the inclusion of "where possible". It submits that the "restoration" of hydrological processes is aspirational and not easily achieved or measurable. Achieving the other matters in (1), (3) and (4) will have positive consequential effects on wetland hydrological processes and accordingly (2) can be removed.	Improve the ecosystem health, hydrological functioning, water quality and extent of natural wetlands that have been degraded or lost by requiring, where possible: (1) an increase in the extent and quality of habitat for indigenous species, ~~(2) the restoration of hydrological processes,~~ (3) control of pest species and vegetation clearance, and (4) the exclusion of stock.	**LF–FW–P10 – Restoring natural wetlands** Improve the ecosystem health, hydrological functioning~~, water quality~~ and extent of natural wetlands that have been degraded or lost by requiring, to the greatest extent practicable ~~where possible~~: (1) an increase in the extent and ~~quality~~ condition of habitat for indigenous species, (2) the restoration of hydrological processes, (3) control of pest species and vegetation clearance, and (4) the exclusion of stock.	**LF–FW–P10 – Restoring natural wetlands** Where it is appropriate and can be practicably achieved, ~~i~~improve the ecosystem health, hydrological functioning~~, water quality~~ and extent of natural wetlands that have been degraded ~~or lost~~ by requiring, ~~to the greatest extent practicable where possible~~: (1) an increase in the extent and ~~quality~~ condition of habitat for indigenous species, (2) the restoration of hydrological processes, (3) control of pest species and vegetation clearance, and (4) the exclusion of stock.
LF-FW-P15 – Stormwater and wastewater discharges Minimise the adverse effects of direct and indirect discharges of stormwater and wastewater to fresh water by: (1) except as required by LF–VM–O2 and LF–VM–O4, preferring discharges of wastewater to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water, and (2) requiring: (a) all sewage, industrial or trade waste to be discharged into a reticulated wastewater system, where one is available,	Support in part and amend.	It is unclear whether this policy is intended to apply to industrial discharges which contain contaminants, but may or may not be mixed with stormwater or waste water. To the extent that it does apply to industrial discharges, OceanaGold requests amendments which recognise that there may be functional or locational constraints or other reasons of practicability as to why industrial discharges may be made to water, and to allow for direct irrigation to land with nitrate or sulphate rich water.	Amendments which address OceanaGold's concerns.	**LF–FW–P15 – Stormwater ~~and wastewater~~ discharges** Minimise the adverse effects of direct and indirect discharges of stormwater ~~and wastewater~~ to fresh water by: ~~(1) except as required by LF–VM–O2 and LF–VM–O4, preferring discharges of wastewater to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water, and~~ (2) requiring: ~~(a) all sewage, industrial or trade waste to be discharged into a reticulated wastewater system, where one is available,~~	No further amendments are necessary.

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(b) all stormwater to be discharged into a reticulated system, where one is available, (c) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems, (d) on-site wastewater systems to be designed and operated in accordance with best practice standards, (e) stormwater and wastewater discharges to meet any applicable water quality standards set for FMUs and/or rohe, and (f) the use of water sensitive urban design techniques to avoid or mitigate the potential adverse effects of contaminants on receiving water bodies from the subdivision, use or development of land, wherever practicable, and (3) promoting the reticulation of stormwater and wastewater in urban areas.				(ab) integrated catchment management plans for management of stormwater in urban areas, (b) all stormwater to be discharged into a reticulated system, where one is made available, by the operator of the reticulated system, unless alternative treatment and disposal methods will result in improved outcomes for fresh water (c) implementation of methods to progressively reduce the frequency and volume of wet weather overflows ~~and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems~~, ~~(d) on-site wastewater systems to be designed and operated in accordance with best practice standards,~~ (e) that any stormwater ~~and wastewater~~ discharges do not prevent water bodies from ~~to~~ meeting any applicable water quality standards set for FMUs and/or rohe, and (f) the use of water sensitive urban design techniques to avoid or mitigate the potential adverse effects of contaminants on receiving water bodies from the subdivision, use or development of land, wherever practicable, and (3) promoting the reticulation of stormwater and wastewater in urban areas.	
New Policy Inserted by s42A report LF-FW-P16				**LF-FW-P16 – Discharges containing animal effluent, sewage, and industrial and trade waste** Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to fresh water by: (1) phasing out existing discharges containing sewage or industrial and trade waste directly to water to the greatest extent possible, (2) requiring:	Amend as follows: **LF-FW-P16 – Discharges containing animal effluent, sewage, and industrial and trade waste** Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to natural waterbodies ~~fresh water~~ by: (1) phasing out existing discharges containing sewage or industrial and trade waste directly to waterbodies ~~to the greatest extent~~ where this is practicable ~~possible~~, (2) ~~requiring~~ considering:

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				(a) new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to fresh water, (b) discharges containing animal effluent to be to land, (c) that all discharges containing sewage or industrial and trade waste are discharged into a reticulated wastewater system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for fresh water, (d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring into reticulated wastewater systems, (e) on-site wastewater systems and animal effluent systems to be designed and operated in accordance with best practice standards, (f) that any discharges do not prevent water bodies from meeting any applicable water quality standards set for FMUs and/or rohe, (3) to the greatest extent practicable, requiring the reticulation of wastewater in urban areas, and (4) promoting source control as a method for reducing contaminants in discharges.	(a) new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to ~~fresh~~ a natural waterbody, (b) discharges containing animal effluent to be to land, (c) that all discharges containing sewage or industrial and trade waste are discharged into a reticulated wastewater system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for fresh water, (d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring into reticulated wastewater systems, (e) on-site wastewater systems and animal effluent systems to be designed and operated in accordance with the best practicable option~~standards~~, (f) that any discharges do not prevent water bodies from meeting any applicable water quality standards set for FMUs and/or rohe, (3) ~~to the greatest extent practicable,~~ requiring, where practicable the reticulation of wastewater in urban areas, and (4) ~~promoting~~ the promotion of source control as a method for reducing contaminants in discharges.
LF-LS-P18 – Soil erosion Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from land use activities by: (1) implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure,	Oppose in part and amend.	There is an element of practicability in implementing methods to minimise soil erosion, for example climatic conditions. It is important to recognise this in the policy.	Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from land use activities by, to the extent practicable: (1) implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure,	**LF-LS-P18 – Soil erosion** Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from land use activities by: (2) maintaining vegetative cover on erosion-prone land, and (1) where vegetation removal is necessary or there is no vegetative cover, implementing effective management practices to retain topsoil in-situ and minimise the potential	Amend as follows: **LF-LS-P18 – Soil erosion** Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from land use activities by: (2) maintaining vegetative cover on erosion-prone land, and (1) where vegetation removal is necessary or there is no vegetative cover, implementing effective management practices to ~~retain~~

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(2) maintaining vegetative cover on erosion-prone land, and (3) promoting activities that enhance soil retention.			(2) maintaining vegetative cover on erosion-prone land, and (3) promoting activities that enhance soil retention.	for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and (3) promoting activities that enhance soil retention.	~~topsoil in-situ and~~ minimise the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and (3) promoting activities that enhance soil retention. (The need to re-number the sub-clauses is noted in the s42A report at [1725]).
LF-LS-P21- Land use and fresh water Achieve the improvement or maintenance of fresh water quantity or quality to meet environmental outcomes set for Freshwater Management Units and/or rohe by: (1) reducing direct and indirect discharges of contaminants to water from the use and development of land, and (2) managing land uses that may have adverse effects on the flow of water in surface water bodies or the recharge of groundwater.	Oppose in part and amend,	Direct and indirect discharges may not result in adverse effects and therefore a reduction may not be a necessary requirement.	Achieve the improvement or maintenance of fresh water quantity or quality to meet environmental outcomes set for Freshwater Management Units and/or rohe by: (1) where practicable reducing direct and indirect discharges of contaminants to water from the use and development of land, and (2) managing land uses that may have adverse effects on the flow of water in surface water bodies or the recharge of groundwater.	**LF–LS–P21 – Land use and fresh water** ~~Achieve the improvement or maintenance of~~ The health and well-being of water bodies is maintained or, if degraded, improved ~~quantity or quality~~ to meet environmental outcomes set for Freshwater Management Units and/or rohe by: (1) reducing or otherwise managing the adverse effects of direct and indirect discharges of contaminants to water from the use and development of land, ~~and~~ (2) managing land uses that may have adverse effects on the flow of water in surface water bodies or the recharge of groundwater; and (3) maintaining or, where degraded, enhancing the habitat and biodiversity values of riparian margins.	No further amendments necessary.